



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

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Governor

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Dear Wellhead Protection Plan Applicant:

The 1986 amendments to the Federal Safe Drinking Water Act, Title II, Section 205, Subsection 1428, require states to form wellhead protection programs to protect drinking water sources. The Indiana Wellhead Protection Rule, 327 IAC 8-4.1, establishes Indiana's requirements for Wellhead Protection. Each community public water supply system, as defined in 327 IAC 8-4.1-1, shall develop a wellhead protection plan (WHPP). The purpose of the WHPP is to protect the ground water that supplies public water supply wells. The rule does not require non-community public water supply systems, which may include campgrounds, churches, factories and golf courses, to develop wellhead protection plans. However, non-community systems are encouraged to voluntarily apply wellhead protection.

The Indiana Department of Environmental Management (IDEM) is phasing in the requirements of the Indiana Wellhead Protection Rule. This phased approach allows systems adequate time for the identification, selection and implementation of appropriate ground water protection management measures. The following application form provides direction for a Wellhead Protection Phase I submission.

Please include two (2) copies of your complete application/submission. The application packet should be bound together to prevent separation or loss of individual sheets. Please submit materials in a three-ring binder if possible. Incomplete applications will not be evaluated.

Mail application packets to: the Indiana Department of Environmental Management, Office of Water Management, Drinking Water Branch, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, IN 46224-6015; or submit in person to staff of the Ground Water Section at: 2525 North Shadeland Avenue, Suite 200, Indianapolis, IN (two blocks north of I-70 on Shadeland Avenue).

For more information call (800) 451-6027, press 0 and ask for Mary Hoover or Martha Clark of the Drinking Water Branch at extension 308-3321.



INDIANA WELLHEAD PROTECTION PHASE I APPLICATION

Instructions - Complete all sections of this application. Use the attached checklist to compile all the information required for Phase I submission per 327 IAC 8-4.1-8).

General Information

Date submitted (month, day, year):

Please indicate each item you are submitting for review: ☐ Delineation ☐ Contingency Plan ☐ Phase I Packet

1. System name:

2. System PWSID number:

3. Population served:

4. Name with Personal (Mr./Ms.) and Professional Title of WHP Contact Person:

Mailing address (number, street, city, state, zip code):

E-mail address, Telephone and Fax numbers (with area codes):

5. Delineation Contact Person:

Affiliation or company name:

Mailing address (number, street, city, state, zip code):

E-Mail address, Telephone and Fax numbers (with area codes):

6. Include delineation contact person in IDEM communications? (indicate yes or no):

7. Number of wellfields:

8. Location of wells (please use UTM if available; attach additional sheets as necessary):

Well	Wellfield	UTM-N	UTM-E

Please identify the source of your location information:

SIGNATURE BLOCK

I certify the information in this wellhead protection application is complete and accurate to the best of my knowledge.

of Responsible Official or Designated Agent

Signature
Date

INDIANA WELLHEAD PROTECTION PHASE I APPLICATION

IDEM USE ONLY

Date Application Received:

INDIANA WELLHEAD PROTECTION PHASE I APPLICATION

Instructions - Indicate in the Applicant Use column of the checklist the page number or other appropriate reference where the specified information is located.

Delineation Information 327 IAC 8-4.1-7 (per 327 IAC 8-4.1-6, all maps except topographic maps, must be drawn to a scale between 1"=400' and 1"=1,000')	Applicant Use	IDEM Use Only		
	Location in Application Packet	Information Present? (Yes, no, N/A)	Reviewer	Item #
(a) Requires a report with a narrative description of the regional hydrogeologic setting, the conceptual model, and modeling efforts which includes:				
(1) Analysis of Hydrogeologic Setting and the Conceptual Model:				1
(A) A map of the area of interest;				2
(B) Review of published hydrogeologic and geologic interpretations of the area of interest;				3
(C) Geologic cross sections showing:				
(i) hydrostratigraphic units;				4
(ii) water levels;				5
(iii) relationship of surface water bodies to the hydrostratigraphic units;				6
(iv) pumping wells with screened intervals;				7
(D) Well logs and records used in cross section development;				8
(E) Map(s) of the proposed WHPA illustrating:				
(i) location of CPWSS wells;				9
(ii) location of high capacity wells registered as significant water withdrawal facilities;				10
(iii) surface water features;				11
(iv) thickness and extent of hydrostratigraphic units;				12
(v) regional ground water levels;				13
(vi) bedrock topography;				14

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(6) Summary of raw data used in the development of the conceptual model;				15
(G) Discussion of hydrogeologic parameters;				16
Delineation Information 327 IAC 8-4.1-7 (continued)	Applicant Use	IDEM Use Only		
	Location in Application Packet	Information Present? (Yes, no, N/A)	Reviewer	Item #
(H) Discussion of the ground water flow system including:				
(i) distribution of recharge;				17
(ii) current CPWSS pumping rates and planned changes in pumping rates;				18
(iii) pumping rates of neighboring high-capacity wells;				19
(2) Presentation and Discussion of Modeling Effort:				
(A) Rationale for the delineation method selected;				20
(B) Tabulated summary of model input parameters showing the range over which parameters were varied;				21
(C) Example input file;				22
(D) Map(s) illustrating:				
(i) the domain of the modeled area within the area of interest;				23
(ii) location of any boundary conditions used;				24
(iii) calibration target locations if used;				25
(iv) modeled potentiometric surfaces;				26
(v) resulting WHPA boundaries;				27
(E) Discussion of:				
(i) assumptions used in modeling effort;				28
(ii) changes made to initial conditions;				29
(iii) calibration analysis if used;				30
(iv) water budget of the model if available;				31
(v) effects of uncertainty in input parameters and boundary conditions on modeled WHPA boundaries;				32
Professional Certification 327 IAC 8-4.1-8 (2)				
Verification that delineation was performed by or under the supervision of a Certified Professional Geologist (other if applicable)				33

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WHPA Delineation using the Fixed Radius Method: 327 IAC 8-4.1B7(b)	Applicant Use	IDEM Use Only		
	Location in Application Packet	Information Present? (Yes, no, N/A)	Reviewer	Item #
(b) A copy of IDEM approval letter for use of fixed radius method;				34
(1) Map(s) illustrating:				
(A) WHPA boundary;				35
(B) CPWSS pumping well locations;				36
(C) location of wells in the WHPA registered as significant water withdrawal facilities;				37
(2) A topographic map of the area;				38
(3) Well logs for the CPWSS pumping well(s);				39
Local Planning Team (LPT) Representation: 327 IAC 8-4.1-4				
(a) Verification that the CPWSS coordinated, formed or participated in the LPT (e.g., copies of meeting minutes, agendas, sign-in sheets);				40
(b) Names and affiliations of all LPT representatives;				41
Identification of affected party represented on LPT;				42
(c) Copies of public notice indicating the formation of the LPT;				43
Inventory of Potential Sources of Contamination: 327 IAC 8-4.1-8 (3)				
(A) A narrative description of land use within the WHPA;				44
(B) Map(s) with potential sources of contamination plotted, showing their locations relative to the WHPA;				45
(C) A table containing information describing the potential sources of contamination which includes:				46
(i) facility identification number(s);				47
(ii) facility name(s) and location(s);				48
(iii) site description(s);				49
(iv) any environmental permits issued for the site(s) including permit number and issuing agency;				50
(v) types of contamination at the site;				51
(vi) operating status of site;				52
Management Plan Requirements: 327 IAC 8-4.1-8 (4)		Applicant Use	IDEM Use Only	
		Location in Application Packet	Information Present? (Yes, no, N/A)	Reviewer
				Item #

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(A) Must include a plan to manage the sanitary setback area which contains:				
(i) a description of the measures to manage the areas consistent with the requirements of 327 IAC 8-3;				53
(ii) a description of measures to prohibit the storage and mixing of chemicals, other than those used for drinking water treatment or pesticides regulated by the Pesticide Review Board;				54
(iii) a description of the provisions to secure the wellhead to prevent unauthorized access;				55
(iv) guidelines that employ best management practices for transportation routes within the sanitary setback area;				56
(B) A separate plan to manage the WHPA which contains:				
(i) a description of the management or monitoring measures for all potential sources of contamination. Measures must consider:				57
\$ location(s) of potential sources of contamination;				58
\$ type(s) of potential sources of contamination;				59
\$ hydrogeologic characteristics of the WHPA;				60
(ii) a verification that CPWSS production wells comply with state construction standards and permit requirements;				61
(iii) a copy of the Standardized Monitoring Framework received by IDEM for the contaminants associated with identified potential sources of contamination;				62
(iv) methods or procedures for maintaining and updating records concerning changes in potential sources of contamination within the WHPA;				63
(v) a description of methods used to identify abandoned wells not in compliance with IC 25-39-4-6 and 310 IAC 16-10;				64
(vi) a description of how use, application, storage, mixing, loading, transportation, and disposal of pesticides complies with IC 15-3-3.5 and 3.6;				65
(vii) a description of how property owners, mineral owners and leaseholders of record are notified that they are located in a WHPA;				66
Management Plan Requirements: 327 IAC 8-4.1-8 (4) (continued)	Applicant Use	IDEM Use Only		
	Location in Application Packet	Information Present? (Yes, no, N/A)	Reviewer	Item #
(viii) a description of how owners and operators of identified potential sources of contamination are provided access to a copy of the WHPP;				67
(ix) a description of the public outreach program to educate the public and owners or operators of potential sources of contamination about the consequences of ground water contamination and methods available to avoid contamination;				68
(x) the locations of wellhead protection signs along major thoroughfares along the perimeter of the WHPA;				69
(xi) a description of any other management measures required to comply with this rule;				70

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Contingency Plan Requirements: 327 IAC 8-4.1-8 (5)				
(A) A copy of the local responder training plan;				71
(B) A description of the procedures to be used in emergency response to leaks, spills or illegal discharges;				72
(C) A copy of the list of information provided to local responders, which must include:				
(i) location of the WHPA boundaries;				73
(ii) names of CPWSS operators to contact in case of emergency;				74
(iii) twenty-four (24) hour telephone numbers for:				
(AA) IDEM Office of Environmental Response;				75
(BB) state and local city/county police and fire/hazmat team;				76
(CC) city or county disaster services agency;				77
(DD) water supply owner, superintendent and operator;				78
(EF) city or county hospital;				79
(4) An identification and description of potential alternate sources of water;				80
(5) A description of the procedures and methods to be used in notifying critical water users of an emergency;				81
(6) A copy of the procedures to follow in an emergency and the locations and description of the availability of the complete contingency plan;				82